

STRUCTURAL DESIGN LOADS

BUILDING CODE: 2012 INTERNATIONAL BUILDING CODE
OCCUPANCY CATEGORY: IV
EARTHQUAKE DESIGN DATA:
PER DEPARTMENT OF VETERANS AFFAIRS - SEISMIC DESIGN REQUIREMENTS H-18-8
1. SEISMIC IMPORTANCE FACTOR: I = 1.50
2. SPECTRAL RESPONSE ACCELERATIONS:
Ss = 0.361
S1 = 0.070
3. SITE CLASSIFICATION: D (ASSUMED)
4. DESIGN SPECTRAL RESPONSE ACCELERATIONS:
SDS = 0.364
SD1 = 0.112
5. SEISMIC DESIGN CATEGORY: D
SEISMIC BRACING OF ARCHITECTURAL, MECHANICAL AND ELECTRICAL COMPONENTS
1. FOR SEISMIC DESIGN CATEGORY D COMPONENT BRACING REQUIREMENTS ARE AS FOLLOWS:
ARCHITECTURAL COMPONENTS:
Ip = 1.0 REQUIRED
Ip = 1.5 REQUIRED
MECHANICAL/ELECTRICAL COMPONENTS:
Ip = 1.0 REQUIRED
Ip = 1.5 REQUIRED
2. INTERSTORY DRIFTS:
DESIGN OF COMPONENTS SUPPORTED AT DIFFERENT ELEVATIONS ARE TO BE DESIGNED TO ACCOMMODATE THE FOLLOWING INTERSTORY ELASTIC DEFLECTION: 3/4" PER FLOOR

STRUCTURAL CONCRETE NOTES

C1
SUBMIT ENGINEERED CONCRETE MIX DESIGNS, INCLUDING REQUIRED BACKUP DATA, FOR EACH TYPE OF CONCRETE PROPOSED FOR USE TO THE ARCHITECT/ENGINEER FOR REVIEW. ALLOW ADEQUATE TIME FOR REVIEW PRIOR TO PERFORMING CONCRETE WORK.
C2
DETAIL, FABRICATE, LABEL, SUPPORT AND PLACE CONCRETE REINFORCEMENT IN ACCORDANCE WITH ACI 318 "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT" AND ACI 318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE", LATEST EDITIONS.
C3
SUBMIT DETAILED SHOP DRAWINGS INDICATING REINFORCEMENT SIZE, SPACING AND PLACEMENT TO THE ARCHITECT/ENGINEER FOR REVIEW PRIOR TO FABRICATION.
C4
CLEAN AND MOISTEN CONSTRUCTION JOINTS BETWEEN NEW CONCRETE IMMEDIATELY PRIOR TO PLACING FRESH CONCRETE.
C5
DO NOT USE CALCIUM CHLORIDE IN CONCRETE.
C6
REFER TO THE ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR CURBS, PADS, DEPRESSIONS, WALL/SLAB OPENINGS, SPECIAL FLOOR FINISHES, ETC.
C7
REFER TO ACI 318, CHAPTER 7.7 FOR MINIMUM CONCRETE COVER REQUIREMENTS, UNO.
C8
REFER TO ACI 306 FOR REQUIREMENTS FOR PLACING CONCRETE IN HOT WEATHER AND TO ACI 306 FOR REQUIREMENTS FOR PLACING CONCRETE IN COLD WEATHER.
C9
ADHESIVE ANCHORING SYSTEM HIT-HY 150 ADHESIVE BY HILTI.
C10
PROVIDE ONLY CONCRETE, REINFORCING AND MATERIALS OF THE TYPES AND GRADES LISTED IN THE TABLE BELOW, UNLESS NOTED OTHERWISE.

CONCRETE	FC (PSI)	UNIT WEIGHT (PCF)
LIGHT WEIGHT CONCRETE FILL	3000	115
ALL OTHER CONCRETE (MAX W/C 0.5)	3000	150

REINFORCING	GRADE
TYPICAL BARS	ASTM A-615, GRADE 60
WELDED WIRE FABRIC	ASTM A-185

STRUCTURAL STEEL NOTES

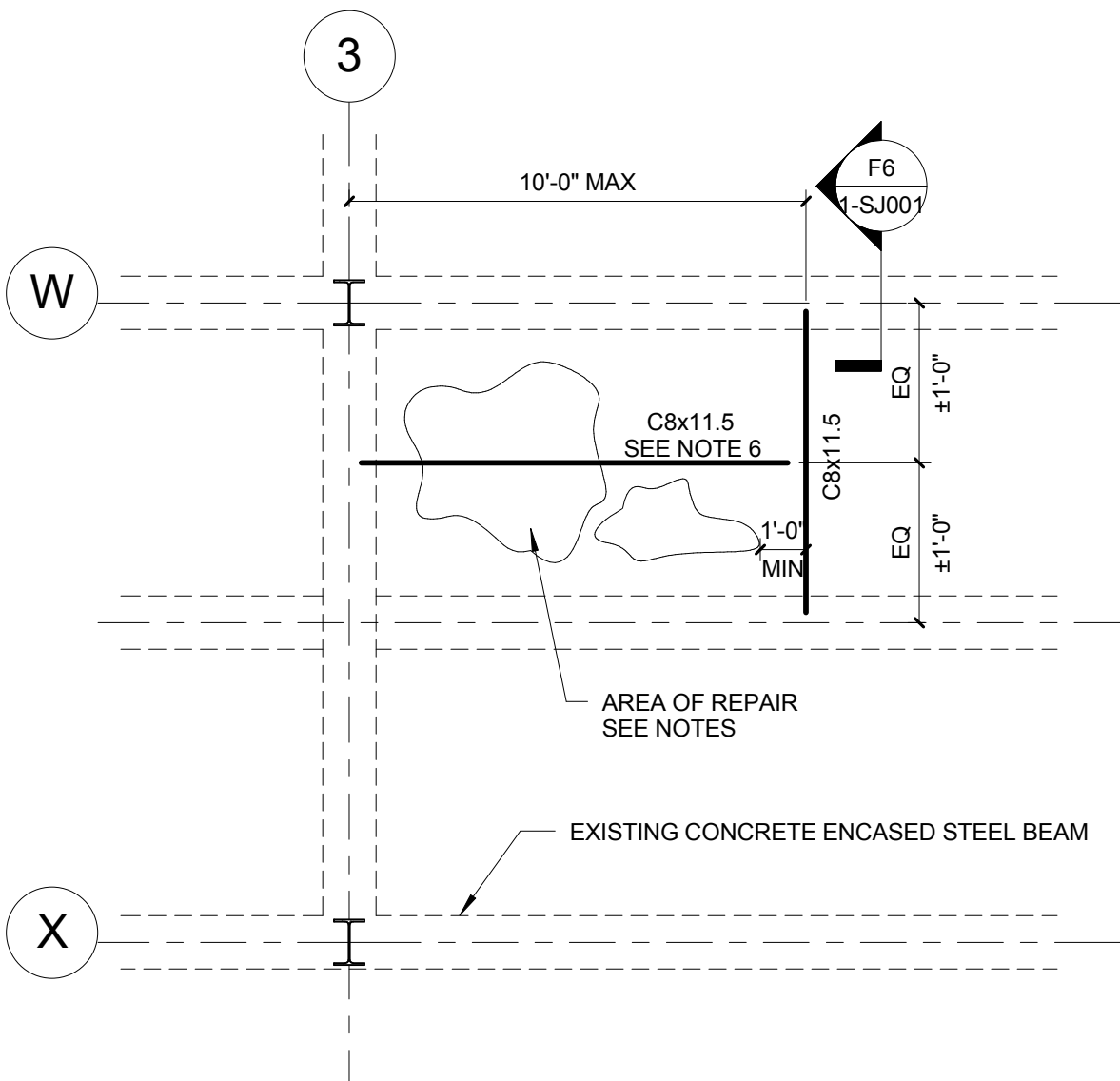
S1
DETAIL, FABRICATE AND ERECT STRUCTURAL STEEL IN CONFORMANCE WITH THE AISC SPECIFICATIONS AND CODES, LATEST EDITIONS.
S2
PERFORM WELDING USING CERTIFIED WELDERS AND IN ACCORDANCE WITH THE AWS "STRUCTURAL WELDING CODE - STEEL", LATEST EDITION. COMPLY WITH AISC SPECIFICATION FOR MINIMUM FILLET WELD SIZES, BUT DO NOT USE LESS THAN A 3/16 INCH FILLET UNLESS SPECIFICALLY NOTED ON THE DRAWINGS.
S3
SUBMIT CHECKED SHOP DRAWINGS TO THE ARCHITECT/ENGINEER FOR REVIEW. SHOW SHOP FABRICATION DETAILS, FIELD ASSEMBLY DETAILS, AND ERECTION DIAGRAM FOR STRUCTURAL STEEL. SCHEDULE SUBMISSIONS TO ALLOW ADEQUATE TIME FOR REVIEW PRIOR TO FABRICATION.
S4
USE BOLTED JOINTS IN FIELD CONNECTIONS WHENEVER POSSIBLE, UNLESS WELDED JOINTS ARE DETAILED.
S5
PROVIDE A MINIMUM OF TWO (2) BOLTS AT EACH FAYING SURFACE.
S6
AFTER FABRICATION, CLEAN STEEL OF RUST, LOOSE MILL SCALE, DIRT, OIL, GREASE OR OTHER FOREIGN MATERIALS.
S7
REFER TO THE ARCHITECTURAL DRAWINGS FOR THE REQUIRED FIRE RATINGS AND UL ASSEMBLY NUMBERS.
S8
DO NOT FIELD CUT STRUCTURAL STEEL UNLESS REVIEWED AND APPROVED BY THE ARCHITECT/ENGINEER IN WRITING.
S9
ERECTION PROCEDURES, SEQUENCES AND COORDINATION OF WORK WITH OTHER TRADES IS THE RESPONSIBILITY OF THE CONTRACTOR. PROVIDE ADDITIONAL STEEL REQUIRED FOR ERECTION PURPOSES AT NO COST TO THE VETERANS ADMINISTRATION. REMOVE THIS ADDITIONAL STEEL UNLESS DIRECTED OTHERWISE BY THE VETERANS ADMINISTRATION IN WRITING.
S10
PROVIDE NEW MATERIAL CONFORMING TO THE FOLLOWING REQUIREMENTS FOR STRUCTURAL STEEL:
MEMBER GRADE
WIDE FLANGE SHAPES, WT SECTIONS ASTM A992
CHANNELS AND ANGLES ASTM A36
ALL OTHER STEEL MEMBERS ASTM A36 UNO
HIGH STRENGTH BOLTS, NUTS AND WASHERS ASTM A-325 (MIN. 3/4" DIAMETER)
STEEL SHAPE WELDING ELECTRODE E70XX

STRUCTURAL STEEL DECK NOTES

SD1
FABRICATE STEEL DECKING FROM STEEL TYPE ASTM A653, STRUCTURAL QUALITY HAVING A MINIMUM YIELD STRENGTH OF 53,000 PSI. COMPLY WITH STEEL DECK INSTITUTE SPECIFICATIONS FOR DESIGN, DETAILING, FABRICATION AND ERECTION OF STEEL DECK. USE STRUCTURAL STEEL DECK WITH A MINIMUM THICKNESS OF AT LEAST 20 GAGE, UNLESS NOTED OTHERWISE.
SD2
PROVIDE CONTINUOUS SHEET METAL CLOSURES AT SLAB OPENINGS AND SLAB EDGES AND CONTINUOUS DECK CLOSURES AT DECK ENDS.
SD3
THE ASSUMED CONSTRUCTION LIVE LOAD USED IN DESIGN IS A 20 PSF UNIFORM LOAD OR A 150 POUND CONCENTRATED LOAD ON A 1'-0" WIDE SECTION OF DECK. DO NOT EXCEED THE ASSUMED CONSTRUCTION DESIGN LIVE LOAD WITHOUT FIRST TAKING PROPER SAFETY PRECAUTIONS, INCLUDING TEMPORARY SHORING. FOLLOW APPLICABLE LOCAL CODE AND AISI REQUIREMENTS.

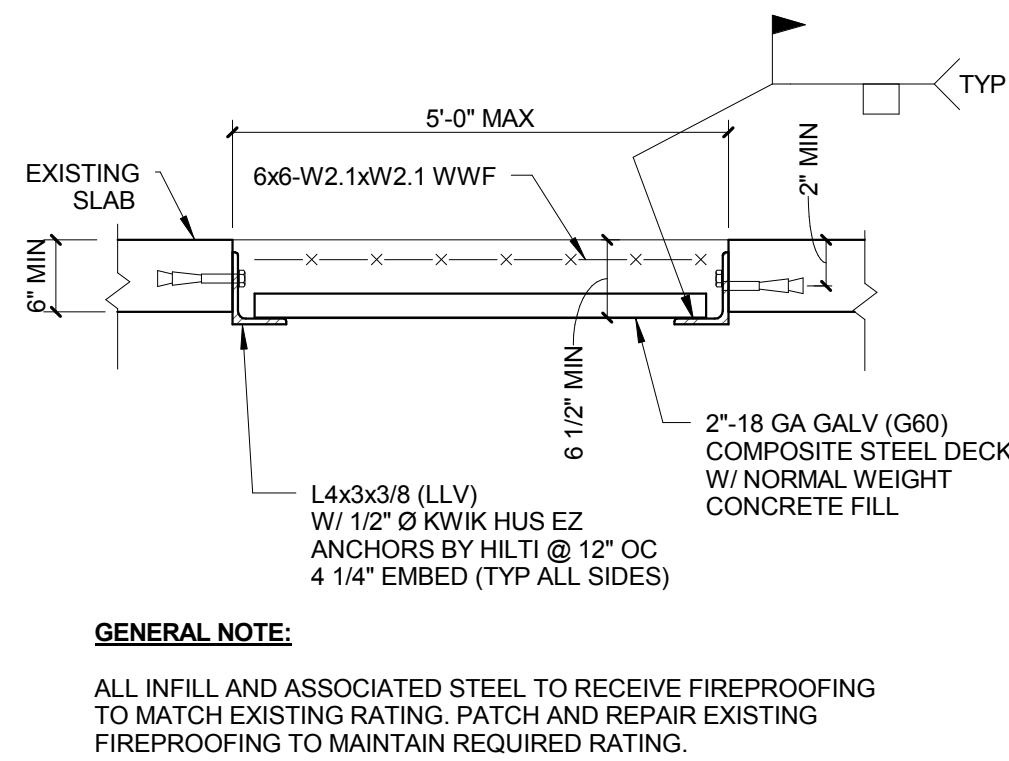
MISCELLANEOUS

M1
CHECK DIMENSIONS AGAINST THE REQUIREMENTS OF OTHER CONTRACT DOCUMENTS. RESOLVE APPARENT INCONSISTENCIES IN THE CONTRACT DOCUMENTS WITH THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH WORK.
M2
SHOW OPENINGS THROUGH STRUCTURAL MEMBERS ON THE SHOP DRAWINGS SUBMITTED FOR REVIEW. OPENINGS WHICH ARE NOT SHOWN ON THE STRUCTURAL DRAWINGS ARE SUBJECT TO REVIEW AND ACCEPTANCE AND ARE TO BE CLEARLY INDICATED FOR REVIEW AND ACCEPTANCE ON THE SHOP DRAWINGS.
M3
DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY SHOWN, USE DETAILS OF SIMILAR CONSTRUCTION, SUBJECT TO APPROVAL BY THE ENGINEER.
M4
WHEREVER THERE IS CONFLICT BETWEEN DETAILS OR TWO DETAILS APPLYING TO THE SAME CONDITION, THE ENGINEER WILL HAVE SOLE AUTHORITY TO DETERMINE WHICH DETAIL IS THE MOST APPROPRIATE FOR THE CONDITION.
M5
PROMPTLY NOTIFY THE ENGINEER OF ANY STRUCTURAL MEMBER CALLED OUT ON THE ARCHITECTURAL, MECHANICAL, PLUMBING OR ELECTRICAL DRAWINGS THAT IS NOT IDENTIFIED ON THE STRUCTURAL DRAWINGS. DESIGN OF THESE MEMBERS WILL BE PROVIDED AS NECESSARY BY THE STRUCTURAL ENGINEER UPON NOTIFICATION.
M6
THE GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE LOCATION AND PLACEMENT OF INSERTS, HANGERS AND OTHER MISCELLANEOUS ITEMS REQUIRED FOR THE SUPPORT OF MECHANICAL, ELECTRICAL AND PLUMBING ITEMS SUSPENDED FROM THE STRUCTURE.
M7
DO NOT MAKE MODIFICATIONS, ALTERATIONS OR REPAIRS TO THE STRUCTURE WITHOUT PRIOR REVIEW BY THE STRUCTURAL ENGINEER. SUBMIT DETAILS AND CALCULATIONS PREPARED BY A PROFESSIONAL ENGINEER REGISTERED NEW YORK STATE AND EMPLOYED BY CONTRACTOR.

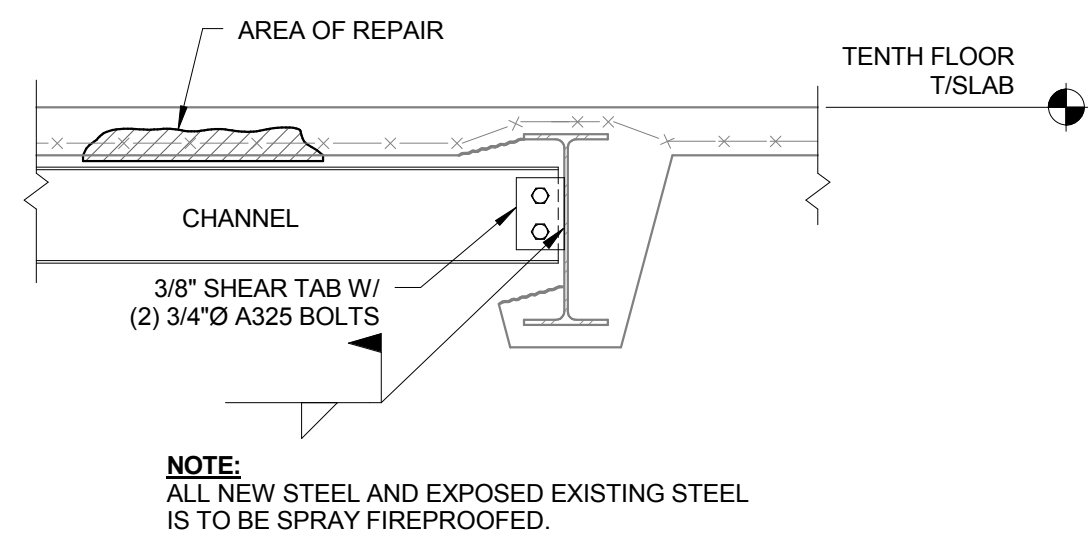


- NOTES:
- WELDED WIRE REINFORCEMENT AND UNCONSOLIDATED CONCRETE REPAIR.
- DO NOT CUT ANY EXISTING REINFORCEMENT.
 - REMOVE LOOSE MATERIAL WITH HAND TOOLS
 - APPLY BONDING AGENT TO UNDERSIDE AREA OF REPAIR AND 6" BEYOND.
 - APPLY REPAIR MORTAR TO AREA OF REPAIR AND 6" BEYOND. MORTAR THICKNESS SHOULD EXTEND 1/2" BELOW THE BOTTOM OF SLAB.
 - INSTALL BONDING AGENT AND REPAIR MORTAR. DO NOT EXCEED ALLOWABLE MORTAR THICKNESS FOR ANY SINGLE LAYER. IN ACCORDANCE WITH THE MANUFACTURERS REQUIREMENTS.
 - SET CHANNEL 1" BELOW UNDERSIDE OF EXISTING SLAB. GROUT SPACE BETWEEN CHANNEL AND SLAB SOLID.

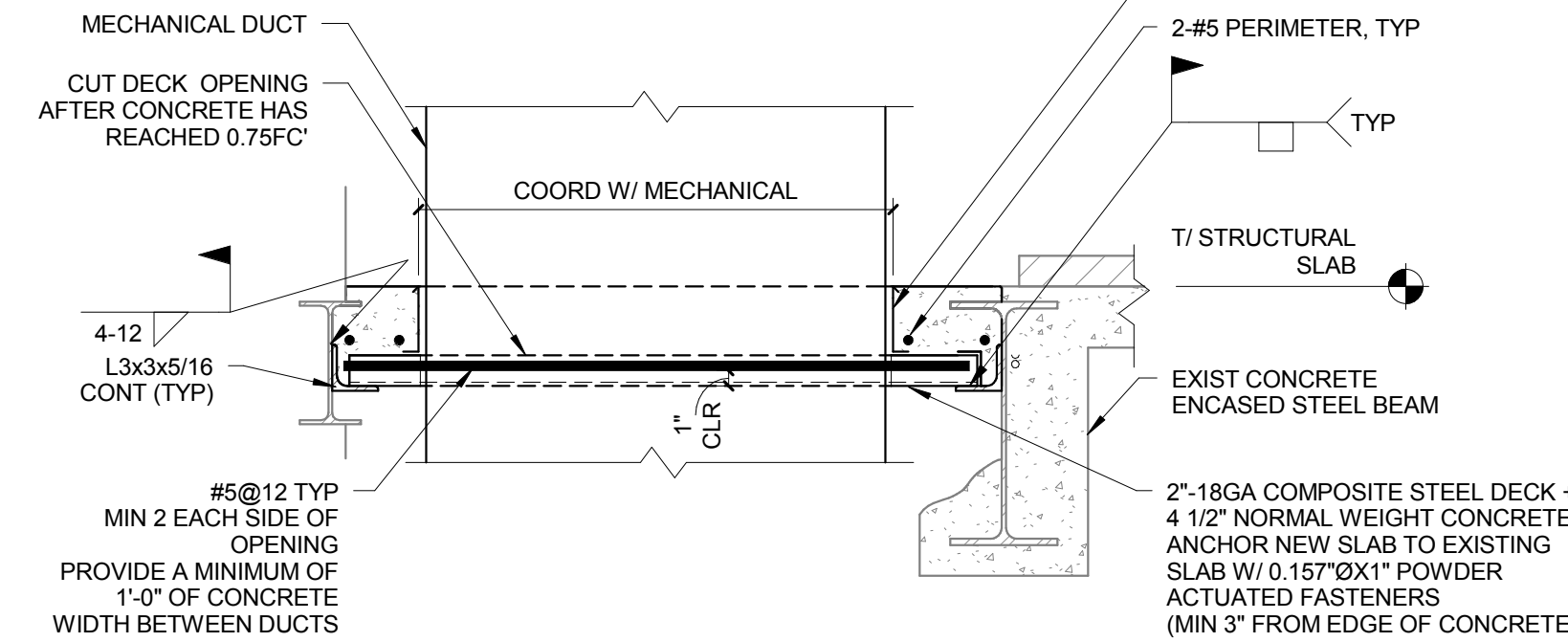
C8 UNDERSIDE OF 10TH FLOOR SLAB - SOUTH
SCALE: 1/4"=1'-0"



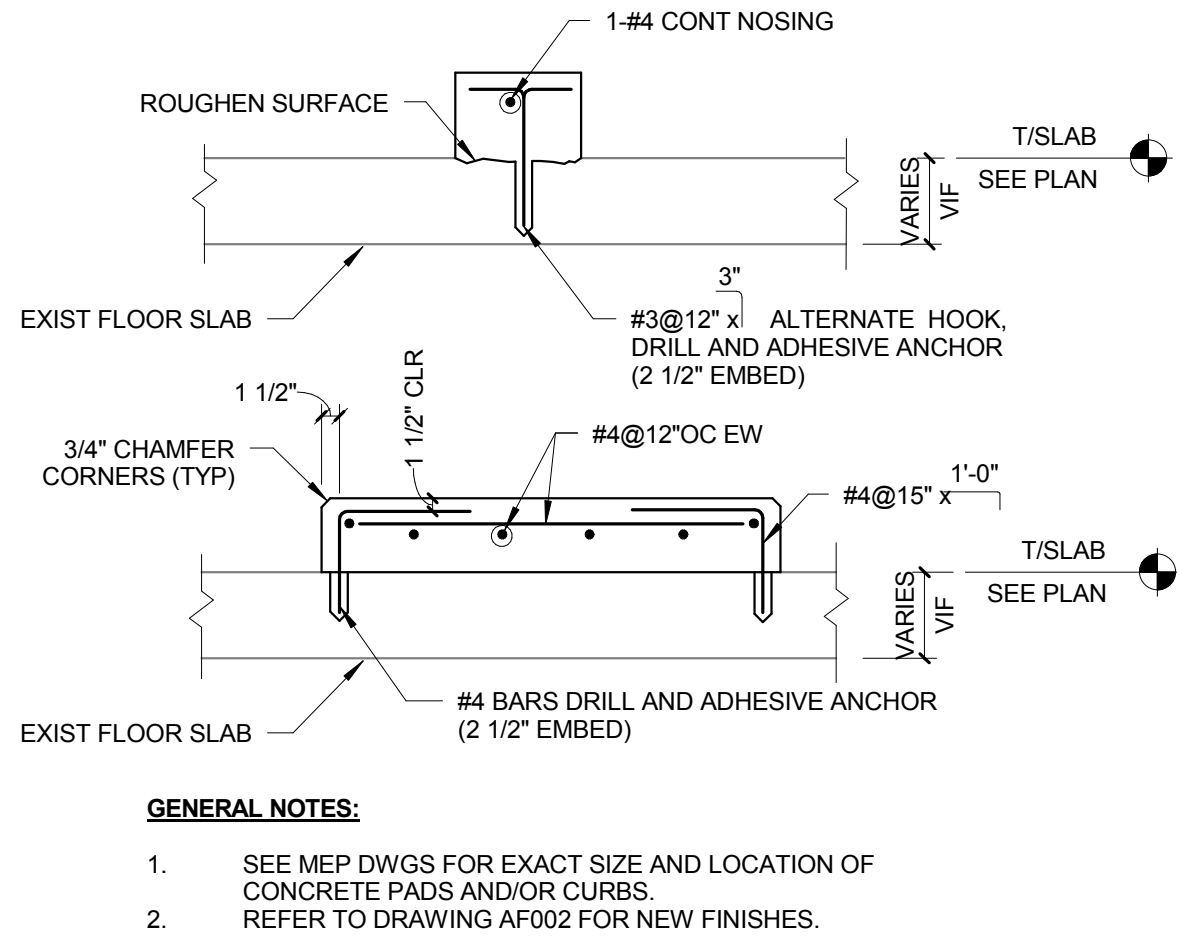
E6 EXISTING SLAB OPENING INFILL DETAIL
SCALE: NTS



F6 SUPPORT FRAME CONNECTION DETAIL
SCALE: NTS



E8 MECHANICAL SHAFT INFILL
SCALE: NTS



F8 TYPICAL HOUSEKEEPING PAD AND CURB AT SLAB ON STEEL DECK DETAIL
SCALE: NTS

CONSULTANTS:		KEY PLAN:		ARCHITECT/ENGINEERS:		Drawing Title STRUCTURAL DETAILS AND GENERAL NOTES		Project Title VA NY HARBOR HEALTHCARE SYSTEM MANHATTAN VAMC - BUILDING 1 9TH FLOOR RENOVATIONS		Project Number 630PR2600		Office of Construction & Facilities Management VA U.S. Department of Veterans Affairs			
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